

Clean Cities Webinar: Planning Ahead with Alternative Fuels—a lesson from Sandy

Alternative Fuels, Clean Cities projects and
Disaster Planning

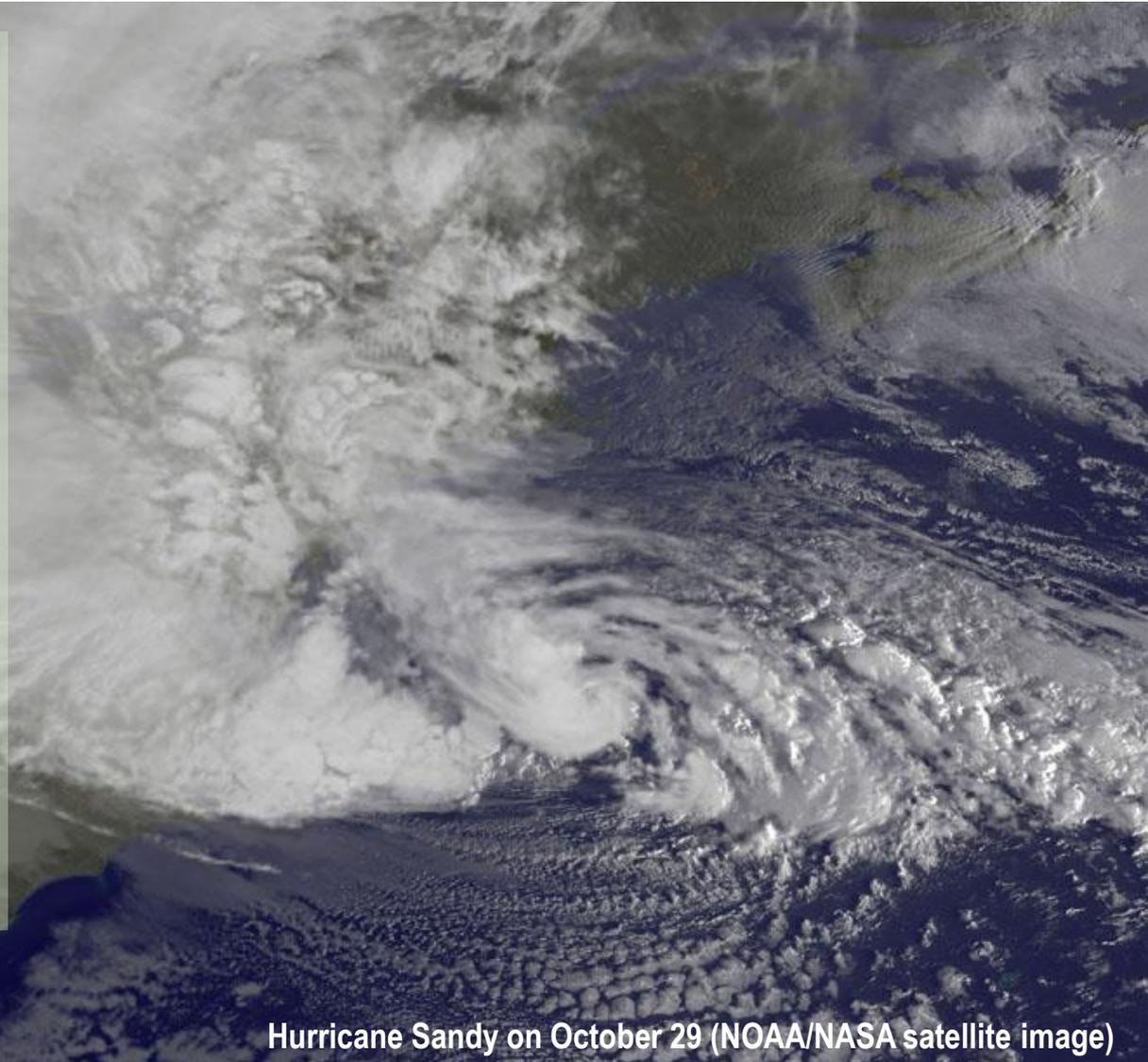
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Hurricane Sandy Strikes the Northeast

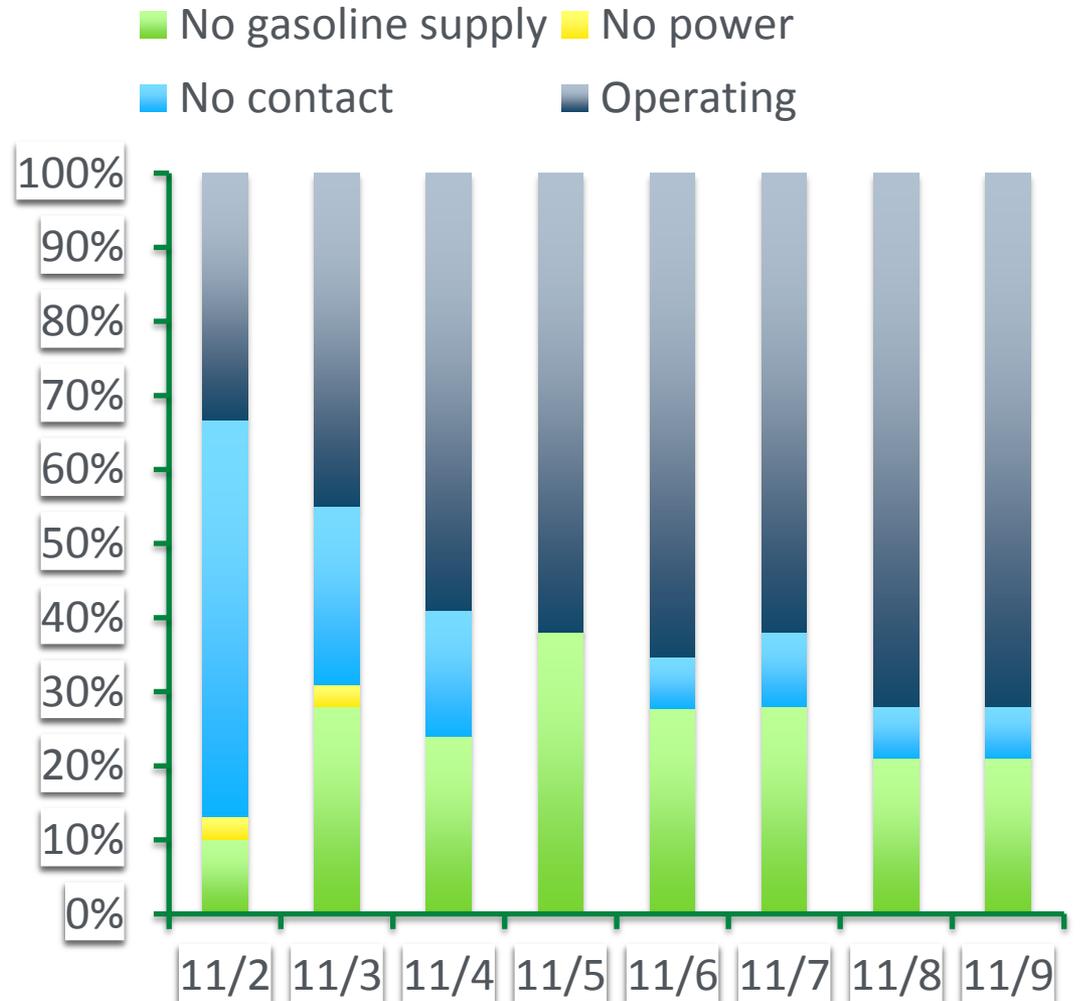
- October 2012 – Category 2 hurricane
- Made U.S. landfall near Atlantic City, NJ
- Storm surge floods portions of New York City
- Widespread power outages
- Petroleum refinery closures



Hurricane Sandy on October 29 (NOAA/NASA satellite image)

Post-Sandy, Transportation Fuels in Short Supply

- Gasoline and diesel supplies limited after Sandy (especially in New York/New Jersey)
 - Some reported no power to run station
 - Some had no fuel to sell
- Some areas instituted gasoline rationing
- 21% of stations still had no fuel 11 days after hurricane



Data from DOE Energy Information Administration

Alternative fuel vehicles keep rolling...

- Alternative fuel vehicles able to assist with preparation and recovery efforts
 - Not dependent on limited petroleum supplies
- Three examples
 - Atlantic City
 - Long Island
 - Connecticut



Atlantic City CNG Jitney Bus



Evacuated elderly and disabled residents from vulnerable areas ahead of the hurricane

Cleanup Efforts (Long Island, New York)



Importance of alternative fuel vehicles

- Hurricane Sandy recovery efforts showed value of alternative fuel vehicles/advanced technology vehicles
 - Able to provide critical services when conventional fuel supplies are interrupted
 - Alternative fuel supplies often remained available post-storm
- Important to include these vehicles in planning efforts
- Clean Cities Coalitions and Coordinators are a great resource
 - Informed about local alternative fuel landscape
 - Connected to key stakeholders

~100 coalitions Serving 78% of the US population

Clean Cities Coalitions



Thousands of stakeholders from businesses, city/state governments, transportation industry, community based organizations, utilities and fuel providers

Western Washington Clean Cities

Population: 3,783,366

Area: 6,599 sq. mi.

Boundaries: Counties: Clallam, Grays Harbor, Jefferson, King, Kitsap, Lewis, Mason, Pacific, Pierce, San Juan Island, Skagit, Snohomish, Thurston, Whatcom

Designated: August 13, 1998

Alternative Fueling Stations:

- Biodiesel (B20 and above): 23
- Natural Gas: 11
- Ethanol (E85): 7
- Electric: 67
- Propane: 23

Annual Greenhouse Gas Emissions

Avoided:* 26,334 lb of CO₂

Annual Petroleum Savings:*

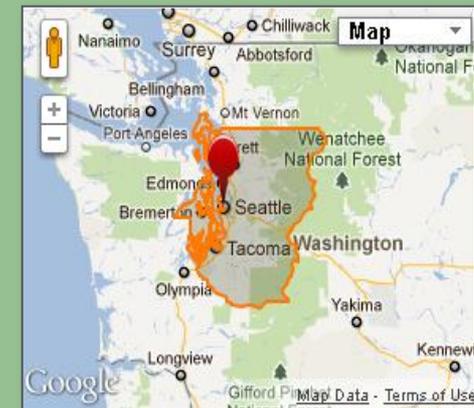
6,945,454 gasoline gallon equivalents



- Alternative Fuel Vehicles (78%)
- Fuel Economy Improvements (12%)
- Fuel Blends (10%)



Stephanie Meyn
Coordinator



“Natural Gas Minibuses Help New Jersey Recover From Hurricane Sandy”

- Highlights the Atlantic City Jitneys that run on compressed natural gas and were able to assist with assistance and relief efforts prior to and after Hurricane Sandy

Clean Cities TV – YouTube

http://www.youtube.com/watch?feature=player_profilepage&v=fV4S-7sPge0

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Alternative Fuels Data Center – Case Studies

<http://www.afdc.energy.gov/case/1323>

For More Information

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Clean Cities Website: www.cleancities.energy.gov
Alternative Fuels Data Center: www.afdc.energy.gov
Fuel Economy: www.fueleconomy.gov



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